

# **Data Science**Overview

13 months (30-40 hrs / week)

#### What is Data Science?

- Data scientists are the architects of data. They can not only build the infrastructure needed to interpret data, but they can also implement data-driven methods of analysis and decision-making using insights from that data.
- This 13-month immersive learning programme will transform you into a skillful practitioner of data analysis and interpretation, regardless of your prior experience.
- You will receive hands-on training in Python programming,
   SQL databases, and data tools like Power Bl in order to solve real-world problems and make data-driven decisions.

### Why Data Science?

There is a growing need across industries for skilled data professionals who understand how to use data-driven methods of analysis to inform decision-making. The Data Science programme is tailored towards moulding emerging data scientists for the real world with practical projects that develop real-world problem-solving skills.

### **Programme Objectives**

- Prepare learners for entry-level roles in data science and related fields by equipping them with essential skills.
- Ensure learners are capable of working with unstructured datasets to extract meaningful insights.
- Offer expert mentorship and a supportive learning environment for successful completion.

# What makes this programme unique?

#### **Future-Ready Training**

This programme is built to help total beginners and data pros alike navigate through the dynamic tech landscape. By engaging with relevant stakeholders in the digital economy, it focuses on teaching in-demand, foundational skills that are adaptable enough to take into the future.

#### **Real-World Application**

Practical, hands-on projects are a priority, as real-world application is the cornerstone of this programme.

Learners get the opportunity to directly apply their new skills to solve genuine data-related problems and learn essential problem-solving skills.

#### **Guided Learning Environment**

Learners receive expert mentorship and guidance from experienced professionals, enhancing their learning journey and overall programme experience.

## Weekly Schedule

#### Weekly

Weekly Assignment submissions due every Monday

#### **Learning Webinars**

Every Tuesday & Thursday

#### **Monthly**

- ALX Foundations Milestone submission
- ALX Foundations Sessions (Office Hours,Speaker Series)
- Self-Placement Reporting

#### **End of Programme**

- Selections Phase 3 Interviews
- Data Science Integrated Exam

#### **Weekly Content**

Fundamentals (20 weeks)

Week 01 : Explore 101

Week 02 - 03: Preparing Data

Week 04 - 08: SOL

**Week 09 - 12:** Data Visualisation & Storytelling

Week 13 - 20 : Python



Machine Learning (15 weeks)

Week 21 - 25 : Regression

**Week 26 - 30 :** Natural Language processing and classification

Week 31 - 35: Unsupervised Learning

**Cloud Practioner (5 weeks)** 

Week 36 - 40: AWS Foundations

Consolidation (2 weeks)

Week 41 - 42: Integrated Exams

